

Attorney Docket No. 60072-0725

**REMARKS****Summary of the Office Action**

1. Claims 1, 16, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Samuels (U.S. Patent No. 5,270,821) in view of Ike (U.S. Patent No. 5,153,765) and Stephan (U.S. Patent No. 5,748,185).
2. Claims 6 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Samuels in view of Ike and Stephan as applied to claims 1 and 16, and further in view of Carroll. (U.S. Patent No. 6,121,960).
4. Claims 32-35 are rejected under 25 U.S.C. 103(a) as being unpatentable over Samuels in view of Ike, Stephan and Carroll.

**Summary of the Response**

Claims 1, 6, 16, 26, 29, 32, 34 and 35 have been amended. Claims 36 – 38 have been added.

Now pending are claims 1, 6, 16, 26, 29, 30, and 32-38.

**Claims 1 and 16**

Claims 1 and 16, as amended, require a personal data assistant (PDA) having the following features:

- (1) detecting an activation signal received in response to user operation of a mechanical button on the PDA application,
- (2) displaying of a user graphical user interface element on the image screen in response to the activation signal, where the displaying is caused by a process running on the PDA under the control of an operating system,

Attorney Docket No. 60072-0725

(3) detecting user interaction with the graphical user interface element by detecting contact on the screen over the graphical user interface element,

(4) adjusting the brightness or contrast of the image screen based on detecting the user interaction.

The claimed invention was motivated, at least in part, by a problem involving the inadvertent adjustment of brightness or contrast controls on some PDAs. Brightness and contrast of an image screen on some PDAs are adjusted using mechanical sliders and wheels disposed on the PDA. These input means were often inadvertently manipulated when sliding a PDA in and out of a pocket or other container. Claim 1 and 16 describe an approach which is not necessarily susceptible to such inadvertent manipulation. Input for controlling the brightness or contrast is entered through physical contact with an image screen over a graphical user-interface element displayed on the image screen. This form of input is referred to herein as touch screen input.

In rejecting claims 1 and 16, the Office Action has alleged the combination of Samuel, Ike, and Stephens discloses all limitations in the claims. In order for a combination of references to be proper under 35 USC 103, there must be a motivation to combine the references in a manner that results in the claimed invention. For example, MPEP 2143.01, (under the title "THE PRIOR ART MUST SUGGEST THE DESIRABILITY OF THE CLAIMED INVENTION") states, "Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so.... *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also *In re Lee*, 277 F.3d 1338, 1342-44, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002) (discussing

Attorney Docket No. 60072-0725

the importance of relying on objective evidence and making specific factual findings with respect to the motivation to combine references); < *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992)."

Although the Office Action attempts to provide motivations for the combination posited, the motivations provided are deficient for the reasons explained below.

The Office Action posits modifying Samuels to incorporate features not taught by Samuels but that are taught, allegedly, by Ike and Stephens. Presumably, the Office Action has equated the PDA to which an image screen is disposed to the video display with a micro-controller taught by Samuels, and the graphical user interface elements to the "on-screen menu" controlled by the micro-controller. In Samuels, the input means for controlling the on-screen menu and brightness and contrast is either a four switch front panel, which may be manipulated by a user, or a PC interface. (col. 5, lines 20 – 31) Presumably the modification posited by the Office Action replaces or supplements the input means of Samuels with one that uses a touch screen input. Furthermore, the modification posited adds an operating system to the video display of Samuels. The operating system controls a process that controls display of a graphical user interface element.

#### **No Motivation to add Touch Screen Input Capability**

The cited art nor the Office Action fail to provide a motivation to modify the input means of Samuels by adding touch screen input capability. The cited art does not suggest that the display video in Samuels suffers from inadvertent manipulation. Further, the cited art fails to suggest that the input means of Samuels has a deficiency that is alleviated by touch screen input technology or that touch screen technology provides a

Attorney Docket No. 60072-0725

benefit over and above that provided by the input means taught by Samuels. Furthermore, the incorporation of touch screen input capability into the video display could substantially increase the cost of the video display of Samuels. If one of ordinary skill expects that a proposed modification to a device provides no benefit for the device but substantially increases its costs, it logically follows that there is in fact no motivation for the proposed modification.

The touch screen input capability not only represents a substantial cost increase but also a completely different manner of operation for the cathode ray tube technology used by the video display of Samuels. A proposed modification cannot change the manner of operation in which the original device was intended to function (See MPEP 2143.01, p. 2100-127, the right column, entitled, "THE PROPOSED MODIFICATION CANNOT CHANGE THE PRINCIPLE OF OPERATION OF A REFERENCE," which cites *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)).

The Office Action has stated that it would have been obvious to one having ordinary skill in the art to allow a video display adjustment and on-screen menu system to thereby provide a video display adjustment system which allows the user easier adjustment of the slider since the user does not have to manipulate the cursor and position the cursor over the scroll board in order to change the display parameters. Presumably the Examiner is referring to manipulating a cursor with a mouse. This allegation seeks to provide a motivation for improving a way of inputting that involves manipulating a cursor with a mouse over scroll board. The allegation does not, however, provide a motivation for improving the front panel input means of Samuels, let alone a motivation for improving the input means of Samuels by adding touch screen input capability.

Attorney Docket No. 60072-0725

**No Motivation to Combine With an Operating System**

As mentioned before, Claim 1 requires displaying a user graphical user interface element on the image screen in response to the activation signal, where the displaying is caused by a process running on the PDA under the control of an operating system. The Office Action posits to modify the video display of Samuels by adding the capability of running an operating system and process that controls the aforementioned displaying.

However, modifying Samuels by adding this capability changes an important principle of operation of Samuels. That principle of operation is that a process controlled by an operating system that controls brightness and contrast on the display video executes externally on a PC and controls the brightness and contract through the PC interface. Adding an operating system capability to the video display to control a process that can display a user interface changes this principle of operation. The principle of operation is an important one. It allows programmatic control by a PC and makes available the power and versatility of the PC to provide input (including the power and versatility of input via GUIs, wireless mouse, and voice input) to control brightness and contrast via the PC interface.

Furthermore, adding an operating system capability to the video display represents a significant cost increase. If one of ordinary skill expects that a proposed modification to a device that provides no benefit for a device that could not be obtained using existing mechanisms on the device (i.e. the PC interface), but that substantially increases the device's cost, it logically follows that there is in fact no motivation for the proposed modification.

Reconsideration and allowance is respectfully requested.

Attorney Docket No. 60072-0725

**Claim 32**

Claim 32 requires the features (1) – (4) enumerated above for claims 1 and 16. For reasons similar to those given for claims 1 and 16, the art cited as rendering claim 32 obvious fails to render claim 32 unpatentable. Reconsideration and allowance is respectfully requested.

**Claim 36**

Claim 36 recites:

in response to user operation of a mechanical button disposed on the PDA,  
launching a first application that displays a graphical user-interface on the  
image screen disposed on a personal data assistant; and  
receiving user input on the image screen to manipulate the user interface; and  
adjusting the brightness or the contrast based on the input.

New claim 36 requires "receiving user input on the image screen to manipulate the user interface" and "adjusting the brightness or the contrast based on the input." These limitations, for reasons given with respect to claims 1, 16 and 32 regarding the cited art's failure to suggest use of touch screen input for controlling brightness or contrast, are not suggested in any way by the cited art. Reconsideration and allowance is respectfully requested.

**Dependant Claims**

The pending claims not discussed so far are dependant claims that depend on an independent claim that is discussed above. Because each of the dependant claims include the limitations of claims upon which they depend, the dependant claims are patentable for at least those reasons the claims upon which the dependant claims depend are patentable. Removal of the rejections with respect to the dependant claims and allowance of the

Attorney Docket No. 60072-0725

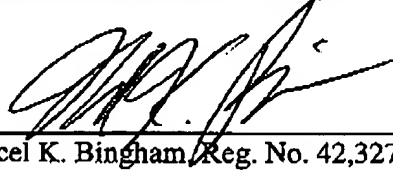
dependant claims is respectfully requested. In addition, the dependent claims introduce additional limitations that independently render them patentable. Due to the fundamental difference already identified, a separate discussion of those limitations is not included at this time.

### CONCLUSION

Accordingly, a Notice of Allowance is requested by Applicants. Should any issues preclude allowance of this application, Applicant urges the Examiner to telephone Applicants' attorney at (408) 414-1206. The Office is given permission to charge any unpaid fees to Applicants' deposit account (50-1302).

Respectfully submitted,

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